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DATE MAILED: 05/20/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

23432 7590 05/20/2009 COOPER & DUNHAM, LLP 30 Rockefeller Plaza 20th Floor

NEW YORK NY 10112

EXAMINER
ZIMMERMANN, JOHN P
ART UNIT
PAPER NUMBER
2861

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/563,698	01/05/2006	Shinji Imoto	2271/75702	2929		
TITLE OF INVENTION: IMAGE FORMING APPARATUS						

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/20/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and or indicated unless correspondence address and or indicated unless

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 23432 7590 05/20/2009 Certificate of Mailing or Transmission COOPER & DUNHAM, LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 30 Rockefeller Plaza 20th Floor NEW YORK, NY 10112 (Depositor's name (Signature APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 10/563.698 01/05/2006 Shinii Imoto 2271/75702 2929 TITLE OF INVENTION: IMAGE FORMING APPARATUS

	APPLN, TYPE	SMALL ENTIT	ISSUE PEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL PEE(S) DUE	DATE DUE
	nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/20/2009
	EXAM	IINER	ART UNIT	CLASS-SUBCLASS]		
	ZIMMERMA	NN, JOHN P	2861	347-104000			
I. Change of correspondence address or indication of "Fee Address" (37 CFR 1.56.) Change of correspondence address (or Change of Correspondence Address form FTUOSB/1/22) thatched. J Tee Address" indication (or 'Tee Address' Indication form FTUOSB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			or agents OR, alternative (2) the name of a single registered attorney or a	3 registered patent attorneyly, e firm (having as a memb agent) and the names of up meys or agents. If no nam	era 2		

ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 🚨 Corporation or other private group entity 🚨 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ Issue Fee A check is enclosed. ☐ Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit an overpayment, to Deposit Account Number (enclose an extra copy of this fo Advance Order - # of Copies (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

□ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _ Date Typed or printed name Registration No.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 manates to complete, including gathering, preparing, and within 50 cm and/or suggestion. For excluding gathering, preparing, and within 50 cm and/or suggestion. For excluding this burden, should be sent to the chief Information Officer, U.S. Posture and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

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maintenance fee notifications.



UNITED STATES PATENT AND TRADEMARK OFFICE

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23432	590 05/20/2009		EXAMINER	
COOPER & DUNHAM, LLP			ZIMMERMANN, JOHN P	
30 Rockefeller Pla	nza		ART UNIT	PAPER NUMBER
20th Floor NEW YORK, NY	10112		2861 DATE MAII ED: 05/20/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 260 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 260 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/563,698	IMOTO ET AL.	
Examiner	Art Unit	
John D. Zimmormonn	2961	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. A This communication is responsive to Amendments Dated 17 February 2009.
- The allowed claim(s) is/are 1, & 14-24.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - - 1. T Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No.
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ASANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) Thereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. M Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date <u>07 APR 09</u>

 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other _____.

/MATTHEW LUU/

Supervisory Patent Examiner, Art Unit 2861

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Art Unit: 2861

DETAILED ACTION

Claim Objections

 Claim 1 was objected to because of informalities. Applicant's Amendments, as discussed below, address the informalities and the objection is withdrawn.

Response to Amendment

- Applicant's amendment to claim 1, to correct the objected to informalities has been recognized and examined as such.
- Applicant's amendment to claims 16 & 22, to include substantially more descriptive and further limiting claim language, has been recognized and examined as such.
- Examiner notes Applicant's addition of claim 24 and results of examination are presented below.

Additional Prior Art of Record

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maki et al. (US 2004/0263603 A1) teaches a similar recording-medium conveying device with a single AC bias voltage applying unit. Maki et al. (US 6,786,590 B2) teaches a similar recording-medium conveying device with a single AC bias voltage applying unit.

Allowable Subject Matter

- Claims 1, 16, & 22 are allowed as amended.
- Claims 14-15 are allowed as presented, dependent on claim 1.

Application/Control Number: 10/563,698

Art Unit: 2861

- 8. Claims 17-21 & 23 are allowed as presented, dependent on claim 16.
- 9. Claim 24 is allowed as added, dependent on claim 16.
- 10. The following is an examiner's statement of reasons for allowance:
- 11. As related to amended independent claims 1, 16, & 22 as well as all dependent and further dependent claims, an additional search was conducted based on the amendments to the claim and the existing and additional prior art of record fails to teach or fairly suggest an image forming apparatus comprising all of the specific structural limitations as recited, in combination with and particularly including, a head unit, a conveyance unit comprising a conveyance belt wound around at least two rollers, a charging unit provided in the conveyance unit and configured to receive a first AC bias voltage and apply a charge, based on the first AC bias voltage, a charge eliminating unit configured to receive a second AC bias voltage, an AC bias supplying unit configured to supply said first and second AC bias voltages at selected timings. Furthermore, the limited disposition of the charge eliminating unit in independent claim 1, the limited movement distance of the conveyance unit from the charging unit to the charge eliminating unit of independent claim 16, and the structural inclusion of a heating unit as claimed in claim 22 differentiate between the independent claims.
- 12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2861

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Zimmermann whose telephone number is (571)270-3049. The examiner can normally be reached on Monday - Thursday, 7:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on 571-272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MATTHEW LUU/ Supervisory Patent Examiner, Art Unit 2861

ThS